

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-16 (Canceled)

Claim 17 (New): A method for the synthesis of compounds selected from the group consisting of aminodihalophosphines, diaminohalophosphines, triaminophosphines, phosphorous ester diamides, aminophosphines, diaminophosphines, phosphorous ester amide halides, aminophosphine halides and phosphonous ester halides wherein an acid is formed during said synthesis the improvement comprising the step of eliminating said acid formed during said synthesis in the presence of an auxiliary base, wherein

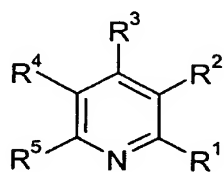
- b) the auxiliary base and the acid form a salt which is liquid at temperatures at which the desired product is not significantly decomposed during the process of separating off the liquid salt and
- c) the salt of the auxiliary base forms two immiscible liquid phases with the desired product or the solution of the desired product in a suitable solvent.

Claim 18 (New): The method as claimed in claim 1, wherein the salt of the auxiliary base has a melting point below 160°C.

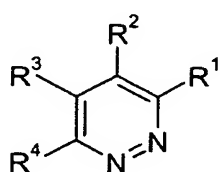
Claim 19 (New): The method as claimed in claim 1, wherein the salt of the auxiliary base has an $E_T(30)$ of more than 35.

Claim 20 (New): The method as claimed in claim 1, wherein the base contains at least one nitrogen atom.

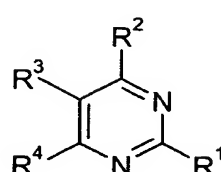
Claim 21 (New): The method as claimed in claim 1, wherein the base used is selected from among compounds of the formulae (Ia) to (Ir),



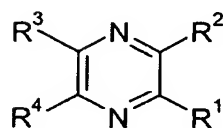
(a)



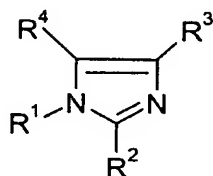
(b)



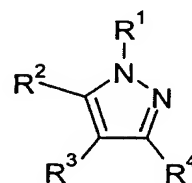
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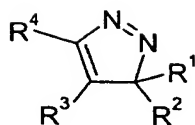
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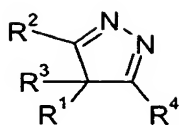
(e)



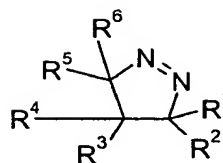
(f)



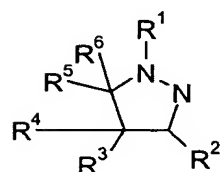
(g)



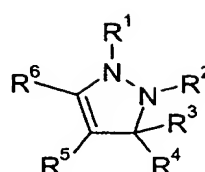
(h)



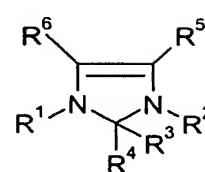
(i)



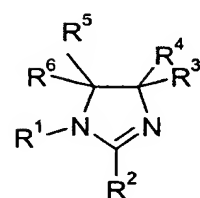
(j)



(k)



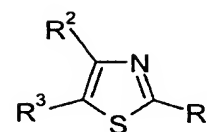
(l)



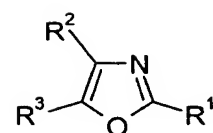
(m)



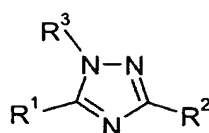
(n)



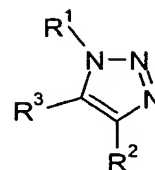
(o)



(p)



(q)



(r)

where

R^1 , R^2 , R^3 , R^4 , R^5 and R^6 are each, independently of one another, hydrogen, C_1 - C_{18} -alkyl, C_2 - C_{18} -alkyl which may be interrupted by one or more oxygen and/or sulfur atoms and/or one or more substituted or unsubstituted imino groups, C_6 - C_{12} -aryl, C_5 - C_{12} -cycloalkyl or a five- to six-membered, oxygen, nitrogen- and/or sulfur-containing heterocycle, where

each of the abovementioned radicals may be substituted by functional groups, aryl, alkyl, aryloxy, alkyloxy, halogen, heteroatoms and/or heterocycles.

Claim 22 (New): The method as claimed in claim 1, wherein the auxiliary base is 1-n-butylimidazole, 1-methylimidazole, 2-methylpyridine or 2-ethylpyridine.

Claim 23 (New): The method as claimed in claim 1, wherein the auxiliary base is di-n-butyl-n-pentylamine or 1,5-diazabicyclo[4.3.0]non-5-ene (DBN).

Claim 24 (New): The method as claimed in claim 1, wherein the salt of the auxiliary base is soluble to an extent of less than 20% by weight in the desired product or in the solution of the desired product in a suitable solvent.

Claim 25 (New): The method as claimed in claim 1, wherein
diphosphorous diester amides ($[N](R'O)P-O-Z-O-P[N'](OR'')$),
diphosphorous ester diamides ($[N][N']P-O-Z-O-P[N''] [N''']$),
bistriaminophosphines ($[N][N']P-[N'']-Z-[N''']-P[N''''][N''''']$),
or systems of the formula

$[N](R'O)P-O-Z-O-P(OR'')(OR''')$,

$[N][N']P-O-Z-O-P(OR'')(OR''')$ or

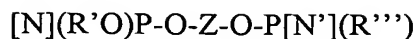
$[N][N']P-O-Z-O-P[N''](OR''')$

or systems which are both nitrogen- and carbon-substituted on each phosphorus and have the formula

$[N](R')P-O-Z-O-P[N'](R''')$ or

$[N](R')P-[N'']-Z-[N''']-P[N'](R''')$

or systems of the formula



are prepared,

where R, R', R'' and R''' can be any organic radicals which may be identical or different, [N], [N'], [N''], [N'''], [N'''''] and [N'''''''] are unsubstituted, monosubstituted or disubstituted amino groups which may be identical or different and Z can be any divalent bridge.

Claim 26 (New): The method for preparing phosphorus compounds from the appropriate starting materials as set forth in claim 1, wherein the preparation is carried out continuously at from 30°C to 190°C and a residence time of from 1 second to 1 hour.

Claim 27 (New): A method of removing acids from reaction mixtures comprising conducting said reaction in the presence of an auxiliary base, wherein

- b) the auxiliary base and the acid form a salt which is liquid at temperatures at which the desired product is not significantly decomposed during the process of separating off the liquid salt and
- c) the salt of the auxiliary base forms two immiscible liquid phases with the desired product or the solution of the desired product in a suitable solvent, and the desired product is firstly distilled off from the reaction mixture in the presence of the auxiliary base in the protonated form and the auxiliary base is then set free by means of a strong base and the free auxiliary base is subsequently distilled.

Claim 28 (New): A method of removing acids from reaction mixtures comprising conducting said reaction in the presence of an auxiliary base, wherein

- b) the auxiliary base and the acid form a salt which is liquid at temperatures at which the desired product is not significantly decomposed during the process of separating off the liquid salt and
- c) the salt of the auxiliary base forms two immiscible liquid phases with the desired product or the solution of the desired product in a suitable solvent, and the auxiliary base is firstly set free by means of a strong base and the free auxiliary base is subsequently distilled in the presence of the desired product and the desired product is then distilled.

Claim 29 (New): A method of stopping acid-catalyzed reactions, comprising neutralizing the acid catalyst in a chemical reaction with an auxiliary base, wherein

- b) the auxiliary base and the acid form a salt which is liquid at temperatures at which the desired product is not significantly decomposed during the process of separating off the liquid salt and
- c) the salt of the auxiliary base forms two immiscible liquid phases with the desired product or the solution of the desired product in a suitable solvent.